



Water Quality NewsFlash

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Stormwater Program Costs – CSU study (continued) – Last week's *NewsFlash* reported on the initial part of a two-part study looking at implementation costs for stormwater programs. The first part examined current program implementation costs for 6 municipal permittees. The second part (Task B) considered the potential overall costs for bringing LA area municipal stormwater into compliance with standards. (Caltrans is considered a municipal-type permittee.) This effort was partially intended as a response to an earlier highly publicized study: *An Economic Impact Evaluation of Proposed Storm Water Treatment for Los Angeles County* (Gordon et al., 2002). This earlier study, done by engineers and economists at USC, estimated that it would cost about \$44 billion to treat flows from 70% of the average annual storm events in the LA area and 6 times that much to treat 97% of the flows (see *NewsFlash* 03-03). These costs were so high because the study assumed that most stormwater would need to be collected and sent to advanced treatment facilities in order to comply with water quality standards including TMDL requirements. This treatment assumption has been disputed.

Task B in the CSU study was completed by engineering and political science faculty at USC and UCLA. The study looked at the issue differently and assumed non-treatment approaches would be adequate for stormwater quality control. Rather than estimating costs for stormwater treatment controls, this effort looked at source control as the primary stormwater management alternative including litter control and improved street cleaning. The study suggested that these measures “may constitute sufficient control for runoff coming from residential areas, so that these areas will require no further action.” The study also noted that, “Where non-structural BMPs will not be adequate, or where implementation is very expensive, efforts must expand to include regional wetlands and stormwater parks (multiple-use infiltration basins).” Infiltration (percolation into the soil) is also projected for higher density urban areas. Based on these assumptions that the relatively low-cost source controls will be adequate, the total LA area costs for stormwater management are estimated at \$2.8 to 7.4B.

However, the report goes on to state that because of the recent California Toxics Rule, TMDLs, and increasingly strict NPDES Permit requirements, “It is quite feasible, indeed likely, that the ultimate public policy result to these simultaneous requirements will be advanced treatment of storm water and urban runoff.” Thus, the actual costs could be closer to the earlier report.

Caltrans is currently constructing Gross Solids Removal Devices (GSRD) in the LA area in order to meet the Trash TMDL, which requires stormwater trash to be completely removed from stormwater. The 100% control goal means that sweeping, prevention, and similar efforts, while helpful, will not result in compliance. In other words, source control may significantly reduce the amount of trash but will not provide the 100% control required by the TMDL. Similarly, it would seem that source control alone is unlikely to be adequate for problem pollutants such as copper, zinc, bacteria, and dioxin, especially if compliance must be achieved “end-of-pipe.” Infiltration, of course, prevents pollutants from discharging to surface waters but may be difficult to implement on a large scale due to inappropriate soils, high water tables, plus concerns over groundwater contamination and seismic risk (liquefaction from elevated groundwater table). The CSU report, including Tasks A & B is posted : <http://www.owp.csus.edu/research/npdes/>. 2002 USC rpt: http://www.citiessavejobs.com/dynamic/downloads/individual_download_file_link_english_175.pdf

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